Programming Tutorial (Advanced)
Bauhaus-Universität Weimar

Disclaimer: Please always test your code after completing the exercises. Testing means by adding proper JUnit tests and/or UI tests as presented in the Testing-Session.

Task 1

Extend your current walking App by an Intent Service. Let the user fix an Interval i (e.g. 5 minutes). Then, after every i minutes, create a `Notification` that i minutes have passed and an `AlertDialog` informing you about the time passed since you started to walk, the distance, your current speed and the average speed.

Hints:

- You can get the distance between two points with:
  `firstLocation.distanceTo(secondLocation)`

- You can get the current speed with:
  `location.getSpeed()`

- For the average speed (minutes needed for 1km), just stick to this formula:

$$average = \frac{time}{distance}$$